

In the Claims

1 1. (currently amended) A method selecting a circuit to service an application
2 request to transmit data over a network, the network having a plurality of
3 circuits that include at least one low bandwidth circuit and one high
4 bandwidth circuit, comprising:

5 measuring, for each of the circuits, an average utilization if the
6 application request is assigned to the circuit;

7 assigning the application request to the high bandwidth circuit if the
8 average utilization is less than a predetermined threshold;

9 assigning the application request to the low bandwidth circuit if the
10 average utilization is less than one, and otherwise

11 declining the application request, and wherein the average utilization
12 for each circuit is determined as a probability, and further comprising:

13 selecting a particular circuit having a smallest probability;

14 assigning the application request to the selected circuit if the
15 selected circuit is the high bandwidth circuit and the average utilization is
16 less than a predetermined threshold;

17 assigning the application request to the selected circuit if the
18 selected circuit is the low bandwidth circuit and the average utilization is
19 less than one, and otherwise declining the application request.

1 2. (previously presented) The method of claim 1 wherein the predetermined
2 threshold is one minus a guard bandwidth for preventing saturation of the
3 high bandwidth circuit.

3. (cancelled)

1 4. (currently amended) The method of ~~claim 3~~ claim 1 wherein the network
2 includes a plurality of high bandwidth circuits.

1 5. (currently amended) The method of ~~claim 3~~ claim 1 wherein the
2 probability is based on a mean data arrival rate μ_s and a standard deviation
3 σ_s of the data arrival rate of traffic with an identical application type as the
4 application request, and with a mean data rate μ_w and a standard deviation
5 σ_w of aggregate traffic on the high bandwidth circuit.

1 6. (original) The method of claim 5 wherein the mean data arrival rate μ_s
2 and the standard deviation σ_s of the data arrival rate of traffic with the
3 identical application type as the application request, and with the mean data
4 rate μ_w and the standard deviation σ_w of aggregate traffic on the high
5 bandwidth circuit are stored in a table.

1 7. (previously presented) The method of claim 1 wherein the average
2 utilization U_h of the high bandwidth circuit is within the last M time slots,
3 where M is an integer.

1 8. (currently amended) The method of ~~claim 3~~ claim 1 the average utilization
2 over predetermined number of preceding time slots using taps of a delay
3 line.

1 9. (original) The method of claim 1 wherein a full utilization is measured as
2 one, and no utilization is measured as zero.

10. (cancelled)

1 11. (original) The system of claim 1 wherein the assigning is performed by a
2 switch configured for connecting the low and high bandwidth circuits to the
3 application request.

1 12. (currently amended) The method of ~~claim 3~~ claim 1 wherein the
2 probability is in a form of a Gaussian distribution.